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Municipality/Organization: Town of Rockland, MA

EPA NPDES Permit Number: MA041058

MaDEP Transmittal Number: W-036804

**Annual Report Number
& Reporting Period: No. 8: April 1, 2010 -March 31, 2011**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: John Loughlin **Title: Superintendent Sewer Department**

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Printed Name: John Loughlin

Title: Superintendent Sewer Department

Date: April 27, 2011

Part II. Self-Assessment

In general, the Town of Rockland's stormwater management activities for the eighth year of the General Permit (March 2010 through March 2011) were in conformance with the Notice of Intent (Massachusetts DEP form BRP WM 08A) and schedule submitted in July 2003. The Town has developed a Stormwater Management Plan with program priorities for 2003-2008 including:

1. Achieving regulatory compliance, particularly EPA and DEP Phase II NPDES permit requirements;
2. Incorporating storm water protection measures into municipal activities;
3. Focusing activities on target pollution reduction (e.g. Section 303.d. waters and protecting the Town's water supply);
4. Ensuring that the Program is current and innovative; and
5. Providing Program administration.

The Water Quality Stewardship element of the program focuses on the protection of the local water supply and addressing the State's Section 303.d waters located within the Town. To this end, staff will continue to develop and improve the Program activities to reduce storm water pollution to the maximum extent practicable and eliminate prohibited non-storm water discharges, while facilitating understanding and involvement in storm water management by various Town departments. Program priorities will also focus on increased efforts to reduce target pollutants and restore local water bodies.

The Town is committed to working with local watershed associations to advance their goals and objectives. Another high priority of staff will be to keep abreast of the latest technology and approaches to achieve storm water management. Program activities will also strive to encourage environmental stewardship and continue to build on partnerships with other agencies, neighboring towns, and the community for active participation in accomplishing the Program mission.

The activities performed during Permit Year Eight focused on the continued development of a Town-wide Geographic Information System. In addition, an outfall testing program was also implemented during this permit year, with the collected data compared with the applicable state and federal standards.

The Town also continued with control measures that were initiated during the previous permit year, including improving local good housekeeping programs; and communicating the Town's Plan to local watershed associations. Stormwater Informational Flyers were mailed out to residents during this Permit Year.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
1 Revised	Partnership with local Watershed Associations	Con. Comm., DPW, BOH	Regular Meeting Attendance	Continued updates with North and South River Watershed Association	Continued updating, seek alternative funding opportunities (such as 604b and 319 grants).
2 Revised	Develop Brochures	DPW	Quarterly Mailings	Water department mailings and water quality updates. Stormwater Flyer mailed to Residents in March 2011.	Continued mailings.
3 Revised	WEB Site Public Service Postings	IT Dept., DPW	WEB Site Publication & Maintenance	NSRWA information transfer and publication of data, local WEB updates	NSRWA information transfer and publication of data, local WEB updates
Revised					
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
4	Water Quality Testing	DPW	2 Rounds of Water Quality Sampling of Priority Water Bodies	Continued water quality sampling.	Continue water quality sampling.
Revised					
5	Community Cleanup Days	DPW	Annually	Conducted in Spring 2010	Scheduled for Spring 2011
Revised					
Revised					
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
6 Revised	Catch Basin/Outfall and Receiving Water Mapping	DPW	GIS Mapping	Continued drainage structure mapping and development of GIS mapping	Continue drainage structure mapping and development of GIS mapping
4 Revised	Water Quality Testing	DPW	Testing of Priority Water Bodies	Continued water quality sampling.	Continue water quality sampling.
7 Revised	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions and Action	Reviewed regulations and identify areas for revisions	Review regulations and identify areas for revisions
8 Revised	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements	Ongoing to comply with local bylaws, state and federal requirements
9 Revised	Misconnection/Illegal Dumping and Correction	DPW, BOH	Connectivity Mapping, Bylaw Enforcement and Fines	Continued GIS mapping and bylaw enforcement	Continue and complete GIS mapping and continue local bylaw enforcement

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
7 Revised	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Reviewed regulations and identify areas for revisions	Review regulations and identify areas for revisions
8 Revised	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements	Ongoing to comply with local bylaws, state and federal requirements
10 Revised	Improved As-Built Review	DPW, Planning Board	Electronic As-Built Submittals on Town GIS System	Continued GIS mapping and local bylaw enforcement	Complete GIS mapping and develop protocol for submitting as-builts electronically

4a. Additions

19	Dam Inspections	DPW	Phase I ODS Report	A structural assessment of the Town's dam completed in August 2006.	Address report findings and conclusions.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
7	Regulatory Review	DPW, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Reviewed regulations and identify areas for revisions	Review regulations and identify areas for revisions
8	Permit Enforcement	DPW, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements.	Ongoing to comply with local bylaws, state and federal requirements.

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
11 Revised	Improved Street Sweepings	DPW		Semi-annual Collections	Semi-annual Collections
12 Revised	Improved Catch Basin Cleanings	DPW		Semi-annual Collections	Semi-annual Collections
13 Revised	Household Hazardous Waste Days	DPW		Annual Collection	Annual Collection
14 Revised	Drain Stenciling	DPW	Aquifer Protection Area	GIS Mapping continuing to locate catch basins	Complete GIS mapping and stencil drains in Aquifer Protection Area

6a. Additions

18	Employee Training	DPW	Seminar Attendance	Attended GIS Mapping Seminar Sponsored by Plymouth County Highway Association	Will Attend Goodhousekeeping Training Seminar Sponsored by Plymouth County Highway Association

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) << if applicable >>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
6 Revised	GIS Mapping	DPW	GIS Mapping of Priority Waters and Drainage Patterns	Continued drainage structure mapping and development of GIS mapping	Continue drainage structure mapping and development of GIS mapping
4 Revised	Water Quality Testing	DPW	Semi-Annual Water Quality Testing	Continued water quality sampling.	Continue water quality sampling.
15 Revised	Stormwater Modeling	DPW	Needs Assessment for Category 5 Water Bodies	Continued drainage structure mapping and development of GIS mapping	Continue drainage structure mapping and development of GIS mapping
16 Revised	Misc. Structural BMPs as Needed	DPW	i.e. Construction Improvements	None to date (scheduled for future years as needed)	To be determined
17 Revised	Misc. Non-Structural BMPs as Needed			None to date (scheduled for future years as needed)	To be determined

7a. Additions

7b. WLA Assessment

To date, the Town has focused on available funding sources. GIS mapping of the drainage system and receiving waters has continued and water quality testing will continue in the coming year. WLA assessment will follow.

Part IV. Summary of Information Collected and Analyzed

Permit Year 1 Activities and Information

During Permit Year 1, the Town reviewed the local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they appeared to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. Minor revisions may be required for informing local project proponents of the Phase II one-acre NPDES requirement. The Town also received a project approval certificate from the Massachusetts Water Abatement Trust State Revolving Fund for \$250,000 during the previous period.

Permit Year 2 Activities and Information

During Permit Year 2, an outfall inspection program revealed that of the estimated 206 outfall pipe locations, 60 locations estimated to be on public property were observed to have dry weather flow in November 2004. These locations were field screened for the following:

1. pH;
2. Temperature;
3. Total Dissolved Solids;
4. Specific Conductance; and
5. Turbidity.

Based on the field data, 31 of the outfall locations were resampled for the following in December 2004:

1. E-coli;
2. Total Phosphorous,
3. Dissolved Phosphorous,
4. Ammonia,
5. Surfactants, and
6. Total Suspended Solids.

Of these samples, 8 locations had elevated levels of e-coli above the State's Secondary Maximum Contaminant level of 126 (colonies/100 mL). Elevated levels ranged from 160 to 520 colonies/100 mL. Similar wet weather testing is scheduled for the spring of 2005.

Elevated levels of e-coli may be representative of warm blooded animals (such as humans) or cold blooded animals. Following the wet weather testing and further discussions with the Town, additional testing of Fecal Coliform bacteria or Fecal Strep may be

recommended to ascertain potential sources.

In April 2004, Photogrammetric Technology Inc. (PTI) conducted aerial photography of the Town. The 660 scale color aerial photography was supplemented by ground control appropriate for ASPRS Class I standards for large scale mapping and National Map Accuracy Standards. Over the past several months planimetric data has been developed on the Massachusetts State Plane coordinate system of 1983 (U.S. Survey in feet) and the National Geodetic Vertical Datum (NGVD) of 1988. Project deliverables include:

- Three (3) copies of a Ground Control Survey Report.
- Three (3) copies of an Analytical Aerial Triangulation Report.
- One (1) set of 500-scale planimetric drawings (to be replaced in the future by 100 scale mapping).

All digitized data will be delivered on CD-ROM in AutoCAD 2000 and ArcView 8.3 format. The features to be layered include the following:

- Edge of Pavement
- Unpaved Roads
- Road Centerline
- Driveway
- Parking
- Bridges
- Buildings
- Buildings under Construction
- Mobile Homes and Trailers
- Pools
- Hydrographic Features (Lakes, Ponds, Rivers, Streams, Swamps)
- Drainage Ditches
- Airports
- Railroads

- Transmission Pylons
- Transformer Stations
- Property Fences and Walls
- Woodlands and Treelines (by linetype not scalloped)
- Utility Features (Poles, Manholes, Catch Basins, Hydrants, Vaults).

Topographic Features (Index Contour, Intermediate Contour, Spot Elevations) are in production and the data has been developed in both AutoCAD and ArcInfo format. The next stage will be overlay of assessor map information

The Town will continue to provide updates to the public through water bill mailings and postings on the local WEB site, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism.

The Town has taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar has been scheduled by the PCHA for Summer 2004.

Permit Year 3 Activities and Information

During the Permit Year 3, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued its long range GIS mapping of its storm drainage system and increased its public awareness efforts. Work was conducted under Massachusetts Water Abatement Trust State Revolving Funds.

The Town will continue to provide updates to the public through water bill mailings and postings on the local website, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism.

The Town has taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar was conducted by the PCHA during the Summer 2005.

Permit Year 4 Activities and Information

During the Permit Year 4, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued it's long range GIS mapping of its storm drainage system and increased its public awareness efforts. The Town also closed its expenditures from the Massachusetts Water Abatement Trust State Revolving Fund for its \$250,000 project and is currently seeking alternative funding sources from Town Meeting.

The Town will continue to provide updates to the public through water bill mailings and postings on the local website, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism.

The Town has taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar was conducted by the PCHA during the Summer 2006 and one has been scheduled for Summer 2007.

An assessment of the Town's drainage structures has also begun with inspections of local dams in August 2006. The work was conducted to meet the requirements of the Massachusetts Office of Dam Safety (ODS).

Permit Years 5 and 6 Activities and Information

During the Permit Years 5 and 6, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued it's long range GIS mapping of its storm drainage system and increased its public awareness efforts. The Town is currently seeking alternative funding sources from Town Meeting.

The Town will continue to provide updates to the public through water bill mailings and postings on the local website, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism.

The Town has taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs. An employee training seminar was conducted by the PCHA during the Summer 2007 & 2008 and one has been scheduled for Summer 2009.

Permit Years 7 & 8 Activities and Information

During the Permit Years 7 and 8, the Town continued its review of local, state and federal bylaws relative to stormwater and aquifer protection, and determined that they continue to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy. The Town also continued its long range GIS mapping of its storm drainage system and increased its public awareness efforts. The Town is currently seeking alternative funding sources from Town Meeting.

The Town will continue to provide updates to the public through water bill mailings and postings on the local website, and will continue to work with local watershed associations on possible funding sources and ways in which to promote volunteerism. During Permit Year 8 the Town mailed Stormwater Informational Flyers to residents in March 2011, as required under the Public Education and Outreach Task (Task 1).

The Town has also taken part in employee training seminars sponsored by the Plymouth County Highway Association (PCHA), and will continue to improve its good housekeeping programs.